2378

Family Ratabouridae

Body elongate, cylindrical. Head moderate, or suffall; snout rather short. Eye small or obscure. Mouth cleft reaches below or behind eye. Teeth pointed, conic, recurved, uniserial in jaws and on vomer. Tongue not free. Hind nostrils at subtubulate opening near middle of front border of eye and front nostrils tubular near snout end. Gill openings narrow, inferior or partly inferior slits. Heart some distance behind gills. First branchial opening in pharynx wide, following narrow slits. Body scaleless. Dorsal and anal confined to tail, confluent with caudal, rather low or reduced to low fold which furnished with rays only terminally. Pectorals short, vertical or absent.

Small eels of brackish or salt water, living near shores, on reefs or in estuaries. They are usually found buried in sand, mud or gravel of the bottom. Indo Pacific.

Genus Rataboura Gray

Rataboura Gray, Zool. Miscellany, Feb. 19, 1831, p. 9. Type Inuraena rataboura Buchanan Hamilton, tautotypic.

Moringua Gray, Zool. Miscellany, Feb. 19, 1831, p. 9. Type Moringua linearis Gray, monotypic.

Pterurus Swainson, Nat. Hist. Animals, vol. 2, 1839, p. 334. Type Pterurus maculatus Swainson, designated by Swain, Proc. Acad. Nat. Sci. Philadelphia, 1882, p. 283.

Pachyurus (not Agassiz 1829) Swainson, Nat. Hist. Animals, vol. 2, 1839, p. 335. Type Pachyurus linearis Gray, monotypic.

Ptyobranchus Inc Clelland, Calcutta Journ. Nat. Hist., vol. 5, 1845, p. 199. Type Ptyobranchus arundinaceus Inc Clelland, designated by Jordan, Genera of Fishes, pt. 2, 1919, p. 220.

Apthalmichthys Kaup, Archiv Naturgtd., vol. 22, pt. 1, 1856, p. 68. Type Apthalmichthys javanicus Kaup.

Aphthalmichthys Bleeker, Atlas Ichth. Ind. Néerl., vol. 4, 1864, p. 16. Type Apthalmichthys javanicus Kaup.

Pseudomoringua Bleeker, Atlas Ichth. Ind. Néerl., vol. 4, 1864, p. 14. Type Moringua lumbricoides Bleeker, orthotypic.

Stilbiscus Jordan and Bollman, Proc. U. S. Nat. Mus., vol. 11, 1888, p. 549. Type Stilbiscus edwardsi Jordan and Bollman, orthotypic.

Gordiichthys Jordan and Davis, Rep. U. S. Fish Comm., pt. 16, 1888 (1892), p. 644. Type Gordiichthys irretitus Jordan and Davis, orthotypic.

Body very slender, worm like, depth 30 to 100, tail much shorter than body. Mouth small, weak. Teeth feeble, acute, very small, usually uniserial, sometimes irregularly biserial on vomer. Gill openings small Vertical fins usually rudimentary or covered by skin, often may form short fold around end of tail. Sometimes

dorsal and anal may protrude higher with rays visible anteriorly and posteriorly with mere low fold of skin in middle.

2383

Analysis of species

a'. Rataboura. Dorsal and anal with visible rays anteriorly lower or scarcely more than low fold medially.

b'. Distance between vent and anal origin somewhat more or much less than half head length.

c'. Distance of dorsal origin from anal origin much less than half head length.

d'. Distance between anal origin and vent 1/2 to 3/4 in head; pectorals 5 to 7 in head.

e'. Vomerine teeth biserial; distance between anal origin and vent 1 1/3 in head.

Cagayana.

e''. Vomerine teeth uniserial; distance between anal origin and vent 1 3/4 to 2 in head.

raitaboura.

d.[2] distance between anal origin and vent 1/4 or less in head; pectoral 4 to over 5 in head.

floridiana.

c.[2] distance of dorsal origin from anal origin 1/2 of head; distance between anal origin and vent less than 1/3 of head; pectoral 7 1/2 in head.

robusta.

c.[3] distance of dorsal origin from anal origin more than half head length.

f.[1] Eye 2 in snout. linearis.

f.[2] Eye nearly long as snout. ocularis.

b.[2] distance between vent and anal origin more than head length.

bicolor.

2385

a.[2] Aphthalmichthys. dorsal and anal fin reduced or vestigeal low folds, usually as few weak short rays only at extreme tip of tail.

f.[3] depth 34 to 40; head 8 4/5 to 9 9/10.
macrocephala.

f.[2] depth 40 to 58; head 10 1/2 to 13 1/2.
abbreviata.

f.[3] depth 67 to 95; head 12 to 22.
javanica.

2366

Rataboura cagayana (Veale)
Moringua cagayana Veale, Philippine
Journ. Sci., vol. 4, 1909, p. 493.
Cagayan, Mindanao. — Herre, Philippine
Journ. Sci., vol. 23, No. 2, Aug. 1923,
p. 186, pl. 8, fig. 8 (teeth) (type).
Moringua robusta Herre, Philippine
Journ. Sci., vol. 23, No. 2, Aug. 1923,
p. 185, pl. 7. Dumaguete, Oriental
Negros.

2367

Rataboura raitaborua (Buchanan-Hamilton).

Muraena raitaborua Buchanan-Hamilton, Fishes of Ganges, 1822, pp. 25, 364. [Ganges River.

Ptyobronchus raitborua Mc Clelland, Calcutta Journ. Nat. Hist., vol. 5, 1845, p. 223 (Bengal; error).

Anguilla (Moringua) raitaborua Cantor, Nateurk. Tijdschr. Nederl. Indie, vol. 4, 1853, p. 228 (estuaries of Ganges).

Moringua raitaborua Bleeker, Verhand. Batavia. Genootsch. (Nat. Sch. Bengal), vol. 25, 1853, p. (76) 154 (Calcutta). — Kaup, Archiv Naturg., 1856, pt. 1, p. 69

(compiled); Cat. Apodal Fish Brit. Mus., 1856, p. 106 (no locality). — Günther, Cat. Fishes Brit. Mus., vol. 8, 1870, p. 90 (Hooghly, India, type of Moringua lumbriciformis, Batu). — Beavan, Fresh Water Fishes of India, 1877, p. 160 (Bengal). — Day, Fishes of India, pt. 4, 1878, p. 666, pl. 170, fig. 3; Fauna British India, Fishes, vol. 1, 1889, p. 98, fig. 42. — Weber, Siboga Exped., vol. 57, Fische, 1913, p. 52 (Elat, High Key).

Rataboura hamiltonii Gray, Zool. Miscellany, 1831, p. 9 (on Buchanan-Hamilton).

2389

Rataboura hardwickii Gray, Zool. Miscellany, 1831, p. 9. India; Illustrat. Indian Zool. Hardwicke, pt. 1, 1832-33 (1832), pl. 95, fig. 4.

Ptyobranchus hardwickii Mc Clelland, Calcutta Journ. Nat. Hist., vol. 5, 1845, p. 222 (note).

Pterurus maculatus Swainson, Nat. Hist. Animals, vol. 2, 1839, p. 334 (on Buchanan-Hamilton).

Ptyobranchus arundinaceus Mc Clelland, Calcutta Journ. Nat. Hist., vol. 5, 1845, pp. 200, 221, pl. 10, fig. 1. Bengal.

Ptyobranchus guthrianus Mc Clelland, Calcutta Journ. Nat. Hist., vol. 5, 1845,

pp. 201, 222, pl. 10, fig. 2. Bengal.
Ptyobranchus erythreus McClelland,
Calcutta Journ. Nat. Hist., vol. 5, 1845,
pp. 201, 223, pl. 9, fig. 3. Bengal.
Ptyobranchus multidentata McClelland,
Calcutta Journ. Nat. Hist., vol. 5, 1845,
p. 201, pl. 9, fig. 4. Bengal.
Ptyobranchus multidentatus McClelland
Calcutta Journ. Nat. Hist., vol. 5, 1845,
p. 223 (Bengal).
Ptyobranchus parvidentata McClelland,
Calcutta Journ. Nat. Hist., vol. 5, 1845,
p. 202, pl. 9, fig. 5. Bengal.
Ptyobranchus gracilis McClelland, Calcutta
Journ. Nat. Hist., vol. 5, 1845, pp. 202, 223,

2391

pl. 9, fig. 6. Bengal.

Ptyobranchus brevis Inc Clelland, Calcutta Journ. Nat. Hist., vol. 5, 1845, p. 223. Bengal.

Moringua macrochir Bleeker, Natuurk. Tijdschr. Nederl. Indië., vol. 9, 1855, p. (66) 71. Batu Islands; Atlas Ichth. Ind. Néerl., vol. 1864, p. 15, pl. (3) 147, fig. 4 (type). — Kner, Reise Novara, Fische, 1865, p. 389 (no locality). — Weber and Beaufort, Fishes Indo Austral. Archipelago, vol. 3, 1916, p. 339, fig. 166 (dentition) (Java; Kei Islands).

Muraena rakataborunga (Buchanan-Hamilton) Kaup, Archiv-haturg., 1856, pt. 1, p. 69 (name in synonymy).

Moringua lumbriciformis Kaup, Archiv haturget., 1856, pt. 1, p. 70. India,' Cat. Apodal Fish Brit. Mus., 1856, p. 107 (copied).

Depth 27 to 29 3/5; head 8 to 8 7/8, 5 to 5 3/4 to vent, width 4 to 4 1/8 tail 1 7/8 to 2 in in its length; combined head and trunk. Snout 6 1/2 to 7 in head; eye 14 to 18, 2 to 2 1/2 in snout; 1 3/4 to 2 in interorbital; mouth cleft reaches hind eye edge to half an eye diameter beyond, length 4 1/4 to 4 7/8

in head; teeth simple, conic, uniserial in jaws and on vomer; interorbital 8 to 9 1/5, rather low, convex. Gill opening 9 1/2 to 12, less than interspace.

Dorsal origin at space about 1/4 of head behind vent; caudal short, broad, truncated; anal begins snout length to space equal to combined snout and eye behind vent; pectoral 5 to 5 1/5 in head.

Brown, under surfaces paler. Iris gray. Fins brown like body.

Diagnosis. Distinguished from all the species of its genus by the anterior insertion of the dorsal, which well before the gill openings. The dorsal unusually high, nearly high as body depth, eyes very large and all the teeth uniserial. Aphichthus grandoculis (Cantor) as described by Herre has the dorsal origin over or just before middle of pectoral and the vomerine teeth biserial.

India, East Indies, Philippines.

2394

11004, 11005, 11007. Iloilo market, Panay.
March 29, 1908. Length 302 to 314 mm.

22476. Romblon. March 25, 1908.
Length 173 mm.

2395

Rataboura floresiana (Weber and Beaufort)
Moringua floresiana Weber and Beaufort,
Fishes Indo Austral. Archipelago,
vol. 3, 1916, p. 340, fig. 167 (dentition).
South coast of Flores.

2396

Ratabura robusta (Herre)

Moringua robusta Herre, Philippine Journ. Sci., vol. 23, No. 1, 1923, p. 185, pl. 7. Damaguete, Oriental Negros.

2397

Ratabouria linearis (Gray)

Moringua linearis Gray, Zool. Miscellany, 1831, p. 9. India; Illustrat. Indian Zool. Hardwicke, pt. 1, 1832-33 (1832), pl. 95, fig. 3.

Pachyurus linearis Swainson, Nat. Hist. Animal., vol. 2, 1839, p. 335 (reference).

? Muraena vamos Buchanan-Hamilton, Fishes of Ganges, 1822, pp. 24, 364.

— Day, Fishes of India, ~~etc~~ pt. 4, 1878, p. 666 (note).

Moringua lumbricoidea Richardson, Voy. Sulphur, Ichth., 1844, p. 113, pl. 56, figs. 7-11. China. — Günther, Cat. Fishes Brit. Mus., vol. 8, 1870, p. 91 (China; type of Moringua microchir). —

Rataboura linearis (Gray)

Moringua linearis Gray, Zool. Miscellany, 1831, p. 9. India; Illustrat. Indian Zool. Hardwicke, pt. 1, 1832-33 (1832), pl. 95, fig. 3.

Pachyurus linearis Swainson, Nat. Hist. Animal., vol. 2, 1839, p. 335 (reference).

Ptyobrachus linearis McClelland, Calcutta Journ. Nat. Hist., vol. 5, 1845, p. 222 (note; error).

Moringua lumbricoidea Richardson, Voy. Sulphur, Ichth., 1844, p. 113, pl. 56, figs. 7-11. China. — Günther, Cat. Fishes Brit. Mus., vol. 8, 1870, p. 91 (China; type of Moringua microchir). —

— Jordan and Seale, Proc. U. S. Nat. Mus., vol. 28, 1905, p. 773 ( ); Bull. Bur. Fisher., vol. 26, 1906 (1907), p. 7 (Cavite).

Inoringua lumbricoides Kaup, Archiv naturges., 1856, pt. 1, p. 70 (type); Cat. Apodal Fish Brit. Mus., 1856, pt. 1, p. 70 (type).

— Schmeltz, Cat. Mus. Godeffroy, No. 5, 1874, p. 38 (Ovalau); No. 7, 1879, p. 59 (Ovalau). — Károli, Termesz. Füzetek, Budapest, vol. 5, 1881, p. 185 (Simunjw).

— Elera, Cat. Fauna Filipinas, vol. 1, 1895, p. 591 (Luzon, Manila).

Ophthalmichthys lumbricoides Herre, Philippine Journ. Sci., vol. 23, No. 2, Aug. 1923, p. 189 (copied).

Sauvage, Bull. Soc. Philomath. Paris, ser. 7, vol. 5, 1881, p. 107 (Kwatow). — Oshikawa and Matsumura, Prelim. Cat. Fish. Inus. Tokyo, 1897, p. 6.

Inoringua lumbricoides Kaup, Archiv naturges., 1856, pt. 1, p. 70 (type); Cat. Apodal Fish Brit. Inus., 1856, pt. 1, p. 70 (type). — Schmeltz, Cat. Inus. Godeffroy, No. 5, 1874, p. 38 (Ovalau); No. 7, 1879, p. 59 (Ovalau). — Károli, Termesz. Füzetek, Budapest, vol. 5, 1881, p. 185 (Simunju). — Elera, Cat. Fauna Filipinas, vol. 1, 1895, p. 591 (Luzon, Manila).

Ophthalmichthys lumbricoides Herre, Philippine Journ. Sci., vol. 23, No. 2, Aug. 1923, p. 189 (copied).

Moringua microcheir Bleeker, ~~Natuurk.~~ Tijdschr. Nederl. Indië, vol. 4, 1853, p. 124. Amboina; Cauer, West Sumatra; Atlas Ichth. Ind. Néerl. and vol. 4, 1864, p. 16, pl. (4) 148, fig. 2 (Sumatra; Amboina). — Kner, Reise Novara, Fische, 1865, p. 388 (no locality). — Schmeltz, Cat. Mus. Godeffroy, No. 4, 1869, p. 26 (Ovalau); No. 7, 1879, p. 59 (Ovalau). — Günther, Journ. Mus. Godeffroy, vol. 9, pt. 17, 1910, p. 405 (Marquesas Islands; Ovalau). — Weber and Beaufort, Fishes Indo Austral. Archipelago, vol. 3, 1916, p. 338 (Amboin).

2400

Ophthalmichthys microchir Fowler, Mem. Bishop Mus., vol. 10, 1928, p. 47 (compiled); vol. 11, No. 5, 1931, p. 316 (reference).

Rataboura oculis new species

Depth 45 1/4 ; head 10 1/5, 7 1/6 to vent, width 5 1/5 in its length; tail 2 in combined head and trunk. Snout 7 3/4 in head from snout tip ; eye 9 7/8, 1 1/5 in snout, equals interorbital; mouth cleft reaches opposite eye center, length 4 3/4 in head from snout tip ; teeth simple, conic, uniserial in jaws; interorbital 9 7/8, level. Gill opening 10 3/4, equals interspace.

Dorsal inserted space behind vent equal to head length; anal

inserted behind vent & space equal to 1/3 head; caudal obtusely rounded, rather broad; pectoral 4 3/5.

Brown, paler or lighter below. Eye gray. Fins all pale brown.

diagnosis. Apparently well distinguished by its large eye, short pointed muzzle and space between vent and dorsal origin subequal with the head.

2403

Type No. U.S.N.M.

1 example. Tifu Bay, Bouro Island, Dutch East Indies. December 10, 1909. Length 219 mm.

2404

Rataboura bicolor (Kaup)

Moringua bicolor Kaup, Archiv Naturges., 1856, pt. 1, p. 70. Timor (Leyden Museum); Cat. Apodal Fish Brit. Mus., 1856, p. 107 (copied). —

↑ Bleeker, Atlas Ichth. Ind. Heerk. 4, vol. 4, 1864, p. 15, pl. (3) 147, fig. 1 (Timor). — Günther, Cat. Fishes Brit. Mus., vol. 8, 1870, p. 91 (Timor).

Aphthalmichthys bicolor Fowler, Mem. Bishop Mus., vol. 10, 1928, p. 47 (compiled).

(— Weber and Beaufort, Fishes Indo Austral. Archipelago, vol. 3, 1916, p. 338, fig. 165 (East Flores, New Britain).

2404

Rataboura bicolor (Kaup)

Ioringua bicolor Kaup, Archiv Naturges., 1856, pt. 1, p. 70. Timor (Leyden Museum); Cat. Apodal Fish Brit. Mus., 1856, p. 107 (copied). — Günther, Journ. Mus. Godeffroy, vol. 9, pt. 17, 1910, p. 405 (Kandavu; New Pommerania).

Aphthalmichthys bicolor Fowler, Mem. Bishop Mus., vol. 10, 1928, p. 47 (compiled).

(— Weber and Beaufort, Fishes Indo Austral. Archipelago, vol. 3, 1916, p. 338, fig. 165 (East Flores; New Britain).

2405

Depth 38 1/3 to 49 3/4; head 12 to 12 7/8, 8 1/8 to 8 1/5 to vent, width 5 1/5 to 5 1/4 in its length; tail 2 to 2 1/4 in combined head and trunk. Snout 6 1/2 to 7 1/4 in head from snout tip; eye 12 to 12 1/2, 2 to 2 1/4 in snout, 1 3/4 to 2 in interorbital; mouth cleft reaches opposite hind eye edge, length 4 to 4 1/3 in head from snout tip; teeth simple, conic, small, uniserial in jaws and on vomer, little larger anteriorly, rather few; interorbital 8 2/3 to 9,

low; nearly level. Gill opening
11 to 11 2/3, subequal with interspace.

Lateral line distinct.

Dorsal origin behind vent
variably from space equal to little
postocular length of head to space,
greater than total head length; anal
opposite dorsal though usually
little shorter or lower; caudal
forms rather prominent short point
at end of tail; pectoral 6 to 6 4/5
in total head length.

Brown above, paler or whitish

below. Iris gray. Dorsal, anal and pectoral pale to whitish. Caudal deep or dusky brown.

Philippines, East Indies, Melanesia, Polynesia.

D. 5561. Jeomabal Island (NW.), S. 36° W., 0.2 mile (N. 5° 50' 45" E. 121° 1" 15"), Jolo Island and vicinity. In 10 fathoms. September 18, 1909. Length 235 to 255 mm. 2 examples.

2408

Rataboura macrocephala (Bleeker)

Aphthalmichthys macrocephalus Bleeker,

Nederl. Tijdschr. Dierk., vol. 1, 1863, p.

165. Timor; Atlas Ichth. Ind. Neerl.,

vol. 4, 1864, p. 17, pl. (3) 147, fig. 2 (Timor).

— Peters, Monatsber. Akad. Wiss. Berlin,

1868, p. 275 (Legaspi, Luzon, Albay). —

Bartlett, Sarawak Gazette, vol. 26, no. 368, 1896, p. 180 (Sadong). —

Weber, Siboga Exped., vol. 57, Fische,

1913, p. 52 (Insa Laut). — Herre,

Philippine Journ. Sci., vol. 23, no. 2, Aug.

1923, p. 188, fig. 9 (teeth), pl. 7, fig. 2

(Alaminos and Lubor Beach). — Fowler,

Mem. Bishop Mus., vol. 10, 1928, p. 47

(Samoa).

2409

Ivoringua macrocephala Günther, Cat. Fishes Brit. Mus., vol. 8, 1870, p. 92 (Timor; India). — Day, Fishes of India, pt. 4, 1878, p. 166. — Meyer, Anal. Soc. Espan. Hist. Nat. Madrid, vol. 14, 1885, p. 44 (Rubi, New Guinea). — Day, Fauna British India, Fishes, vol. 1, 1889, p. 98. — Jordan and Seale, Bull. Bur. Fisher., vol. 25, 1905 (1906), p. 45 (Pago Pago). — Gunther, Journ. Inst. Godeffroy, vol. 9, pt. 17, 1910, p. 407 (Kanathia; Viti). — Weber and Beaufort, Fishes Indo Austral. Archipelago, vol. 3, 1916, p. 341 (Simalur; Dirk de Vries Bay, Java; Insa Laut).

Moringua macrocephala Meyer, Anal. Soc.

Morrigua (Apthalmichthys) macrocephalus Steindachner, Sitz. Ber. Akad. Wiss. Wien, Math.-naturw. Klasse, vol. 115, pt. 1, 1906, p. 1422 (Lepolu).

? Morrigua abbreviata (not Bleeker) Vols, Zool. Jahrb. Systems., vol. 19, 1903, p. 410.

Depth 35 1/3 to 39; head 9 to 10 1/5, 6 1/8 to 7 to vent, width 5 to 5 1/3; tail 2 1/3 in combined head and trunk.

Snout 7 to 8 in head from snout tip; eye 15 to 27 1/2, 2 1/2 to 4 in snout; 2 2/3 to 3 2/3 in interorbital; mouth cleft extends 1/2 to 1 1/2 eye diameters behind eye; length 3 4/5 to 4 2/3 in

lead from snout tip; teeth conic, pointed, recurved, uniserial in jaws, anterior larger and stronger; interorbital 6 1/2 to 8 1/5, low, broadly convex. Gill opening 9 1/4 to 16, slightly greater than to 1 2/5 in interspace.

Space between dorsal origin and vent 1 1/4 to 1 2/3 in head; dorsal and anal at low fold, little higher posteriorly where joining short low rounded caudal; pectoral short, length low, about equals eye, base broad.

Brown, lighter below. Fins brown. Eye gray.

India, East Indies, Philippines, Polynesia.

3 examples. Batan Island, tide pools. July 22, 1909. Length 101 to 140 mm. 3 examples.

13989. Iloilo market, Panay. May 31, 1908. Length 427 mm.

23019. Nogas Point, Panay. February 4, 1908. Length 102 to 190 mm. 2 examples.

Rataboura abbreviata (Bleeker)
Aphthalmichthys abbreviatus Bleeker,
Nederl. Tijdschr. Dierk., vol. 1, 1863,
p. 163. Prigi, Java; Batu; Manado,
Celebes; Ternate; Amboyna; Atlas Ichth.
Ind. Néerland, vol. 4, 1864, p. 17, pl. (1) 145,
fig. 1 (Java, Batu, Celebes, Ternate, Amboina,
Timor). — Schmeltz, Cat. Mus. Godeffroy,
No. 4, 1869, p. 26 (Samusi). — Jordan and
Snyder, Proc. U. S. Nat. Mus., vol. 23, 1901,
p. 877 (Yaeyama). — Weber, Siboga Exped.,
vol. 57, Fische, 1913, p. 52 (Ambon; Elat).
— Beaufort, Bijdr. Dierk., Amsterdam,
vol. 19, 1913, p. 99 (Saonek). — Herre,
Philippine Journ. Sci., vol. 23, No. 2, Aug.

1923, p. 190 (Damuguete). — Fowler, Bull. Bishop Mus., no. 38, 1927, p. 6 (Tahiti); Mem. Bishop Mus., vol. 10, 1928, p. 47 (compiled); vol. 11, no. 5, 1931, p. 316 (reference).

Moringua abbreviata Günther, Cat. Fishes Brit. Mus., vol. 8, 1870, p. 92 (type). — Schmeltz, Cat. Mus. Godeffroy, no. 5, 1874, p. 38 (Viti Levu). — Peters, Monatsber. Akad. Wiss. Berlin, 1876 (1877), p. 850 (Pariti, Timor, 6 fathoms). — Schmeltz, Cat. Mus. Godeffroy, no. 7, 1879, p. 59 (Viti Levu). — Elera, Cat. Fauna Filipinas, vol. 1, 1895, p. 591 (Luzon, Manila). — Volz, Rev. Suisse, Zool., vol.

12, 1904, p. 482 (Upper Langkat, Sumatra). — Jordan and Seale, Proc. U. S. Nat. Mus., vol. 28, 1905, p. 773 (Negros). — Jordan and Richardson, Bull. U. S. Fish Comm., vol. 27, 1907 (1908), p. (Ticao). — Gunther, Journ. Mus. Godeffroy, vol. 9, pt. 17, 1910, p. 406 (Fiji). — Weber and Beaufort, Fishes Indo Austral. Archipelago, vol. 3, 1916, p. 341 (North of Flores; Ambon; Banda; Kei; Humboldt Bay, New Guinea). ? Ophthalmichthys intermedius Ogilby, Proc. Royal Soc. Queensland, vol. 20, January 2, 1907, p. 9. North east Australia.

2416

Rataboura intermedia Mc Culloch, Austral. Mus. Mem., vol. 5, June 29, 1929, p. 70 (reference).

Inoringua socialis Günther, Journ. Mus. Godeffroy, vol. 9, pt. 17, 1910, p. 406, pl. 169, fig. A. Tahiti?

2417

Ratabura gangeticus (Fowler)

Aphthalmichthys gangeticus Fowler,
Proc. Acad. Nat. Sci. Philadelphia,
1912, p. 32, fig. 9. Ganges River, India.

2418

Rataboura javanica (Kaup)

Ophthalmichthys javanicus Kaup, Archiv Naturges., 1856, pt. 1, p. 68. Java. — Bleeker, Nederl. Tijdschr. Dierk., vol. 1, 1863, p. 164 (Celebes; Timor); Atlas Ichth. Ind. Néerland, vol. 4, 1864, p. 16, pl. (2) 146, fig. 2 (Java, Celebes, Ceram, Timor). — Snyder, Proc. U. S. Nat. Mus., vol. 23, 1901, p. 877 (compiled). — Beaufort, Bijd. Dierk. Amsterdam, vol. 19, 1913, p. 99 (Laoneh). — Herre, Philippine Journ. Sci., vol. 23, no. 2, Aug. 1923, p. 191 (Dumaguete). — Fowler, Mem. Bishop Mus., vol. 10, 1928, p. 47 (Honolulu, Guam, type of Moringua hawaiiensis); vol. 11, no. 5, 1931, p. 316 (reference).

2419

Apthalmichthys javanicus Kaup, Cat. Apodal Fish Brit. Mus., 1856, p. 105, pl. 14, fig. 71 (head) (copied).

Rataboura javanica McClelland, Asiatic Journ. Journ., vol. 5, pt. 1, June 29, p. 70 (reference):

Inoringua javanica Günther, Cat. Fishes Brit. Mus., vol. 8, 1870, p. 92 (Moluccas, Fiji, Japan). — Schmelty, Cat. Mus. Godeffroy, no. 7, 1879, p. 59 (Samoa). — Ishikawa and Matsuura, Prelim. Cat. Fishes Mus. Tokyo, 1897, p. 5. — Seale, Occas. Pap. Bishop Mus., vol. 4, no. 1, 1906, p. 12 (Nukuhiva, Marquesas). — Günther, Journ. Mus. Godeffroy, vol. 6, pt. 17, 1910, p. 405

(Samoa, Fiji, Friendly Islands, Paumotu, Rarotonga). — Weber and Beaufort, Fishes Indo Austral. Archipelago, vol. 3, 1916, p. 342, fig. 164 (Laoneta, Humboldt Bay, New Guinea). — Fowler, Bull. Bishop Mus., No. 22, 1925, p. 4 (Guam).

Inoringua kawaiiensis Snyder, Bull. U. S. Fish Comm., vol. 22, 1902 (1904), p. 517, pl. 3, fig. 6. Honolulu. — Jordan and Evermann, Bull. U. S. Fish Comm., vol. 23, pt. 1, 1903 (1905), p. 86.

depth 7 8 1/2; head 1 7 1/3, 1 2 1/3 to vent, width 5 in its length; tail 2 1/2 in combined head and trunk. Snout 1 6 4/5 in head from snout tip; mouth cleft 5, extends about 1/2 eye diamters beyond very small rudimentary eye, which 5 in snout and 3 1/2 in interorbital; teeth conic, pointed, recurved, uniserial in jaws, rather large anteriorly; interorbital 9 7/8 in head, convex. Gill opening 10 3/4, about equal to interspace.

Dorsal and anal as very low

rudimentary folds continuous with low or short rounded caudal at posterior portion of tail; no pectoral, though front edge of gill opening with very short or low marginal flap concealing gill opening.

Uniform brown. Iris gray.

East Indies, Philippines, Japan, Micronesia, Polynesia, Hawaii.

8428. Pandanon Island. March 24, 1909.
Length 1030 mm.